

HONOLULU AUTHORITY for RAPID TRANSPORTATION

FOR IMMEDIATE RELEASE

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HART CONTRACTOR DRILLS LARGEST, DEEPEST COLUMN FOUNDATION TO SUPPORT THE HONOLULU RAIL PROJECT

HONOLULU – Shimmick Traylor and Granite (STG), the Honolulu Authority for Rapid Transportation (HART) contractor building the Airport Guideway and Stations segment, has successfully constructed what is believed to be the world's deepest and largest column foundation.

At a depth of 357 feet, 4 inches, and measuring 10 feet in diameter, the column foundation, also known as a drilled shaft caisson, is located in Kalihi Stream on Kamehameha Highway between Middle Street and Pu'uhale Road. It will be used as a base for a column which will support the rail's elevated guideway and the Kahauiki Station. The column's depth at this location was needed to ensure that the station and guideway would be built on a solid underground foundation.

"We've had numerous column foundations ranging in depth from 25 feet to more than 200 feet. Due to the location of this pier, and the type of soil conditions in the area, STG needed to construct this pier at a record-breaking depth," said Andrew Robbins, HART's Executive Director and CEO.

Rusty Lucido, vice president of Shimick Construction's Legacy Foundations group, commented, "Incredible teamwork throughout the planning and execution of the drilling operations allowed STG to install the largest diameter and deepest single cased caisson in the world, according to our research and information from international industry experts.

"To add to the dynamics of this operation, all work had to be performed above a tidal stream from a trestle platform, to minimize the construction impacts to a highly sensitive environmental area. The team's dedication to safety and quality of work has allowed us to complete this challenging operation with no incidents or accidents."

The shaft was drilled from a temporary bridge, called a trestle, which is currently above Kalihi Stream and will be removed once construction of the Kahauiki Station is complete.

Engineering firsts are not new to the Honolulu Rail Transit Project. In addition to having the nation's first cross-urban driverless train system, and the deepest column foundation, STG also erected what's believed to be the world's largest articulated gantry crane to build the overhead guideway structure through the Daniel K. Inouye International Airport area.



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HART anticipates completing the Airport Guideway and Stations segment, which includes the overhead guideway and four rail stations over five miles between Pearl Harbor and Middle Street in 2022.

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